THAT WHICH IS CLAIMED:

1. A bi-stable member for a mobile station, comprising:

a first part;

a second part; and

at least one foldable portion comprised of bi-stable materials configured to foldably couple said first part to said second part, said at least one foldable portion is further configured to bias a mobile station between a folded position and an open position, and said at least one foldable portion includes a substantially flattened transverse cross-section in said folded position and a substantially C-shaped transverse cross-section in said open position.

2. The bi-stable member of Claim 1, wherein said foldable portion of said bi-stable member further comprises:

opposed lateral edges and stiffening portions disposed adjacent thereto,

a median region defined between said stiffening portions,

wherein said stiffening portions are configured substantially planar with said median region in said folded position and configured substantially non-planar with said median region in said open position.

3. The bi-stable member of Claim 1, wherein said foldable portion of said bi-stable member further comprises a laminate structure including:

a resilient substrate layer that is biased toward said open position; and

a plastically deformable layer configured to oppose the bias of said resilient substrate layer in said folded position;

wherein said folded position and said open position are reversible and stable positions.

4. The bi-stable member of Claim 3, wherein:

said plastically deformable layer comprises a polymer.

5. The bi-stable member of Claim 3, wherein:

said resilient substrate layer comprises a strip of metal.

6. The bi-stable member of Claim 3, wherein said laminate structure further comprises:

a plurality of pre-stressed elements disposed adjacent said plastically deformable layer, wherein said pre-stressed elements are under tension in said open position and the tension is at least partially relieved in said folded position.

7. The bi-stable member of Claim 6, wherein:

said plurality of pre-stressed elements are aligned substantially axially in said laminate structure.

8. The bi-stable member of Claim 3, wherein said laminate structure further comprises:

a plurality of pre-stressed elements disposed adjacent said resilient substrate layer, wherein said pre-stressed elements are under tension in said folded position and the tension is at least partially relieved in said open position.

9. The bi-stable member of Claim 8, wherein:

said plurality of pre-stressed elements are aligned substantially transversely in said laminate structure.

10. The bi-stable member of Claim 1, further comprising:

a first functional component coupled to said first part,

a second functional component coupled to said second part, such that said first and second functional components are foldably coupled together by said at least one foldable portion, and

a communication member disposed adjacent said at least one foldable portion for electrically connecting said first functional component to said second functional component.

11. The bi-stable member of Claim 10, wherein:

said first functional component is positioned substantially adjacent to said second functional component in said folded position.

12. The bi-stable member of Claim 10, wherein:

said first functional component is configured relative to said second function element to define an operating angle in said open position, and

wherein said operating angle is substantially between 90 to 180 degrees.

13. The bi-stable member of Claim 10, wherein:

said first functional component is configured relative to said second function element to define an operating angle in said open position, and

wherein said operating angle is substantially between 150 to 180 degrees.

14. The bi-stable member of Claim 10, further comprising:

a protective member disposed between said first functional component and said second functional component for protecting said communication member in said open position.

15. The bi-stable member of Claim 14, wherein:

said protective member defines a maximum operating angle.

16. The bi-stable member of Claim 10, further comprising:

a protective member disposed between said first functional component and said second functional component for protecting said communication member in said folded position.

17. The bi-stable member of Claim 14, wherein:

said protective member defines a minimum fold radius.

18. A foldable device comprising:

a first functional component;

a second functional component;

a communication member for electrically connecting said first functional component to said second functional component;

a bi-stable member for biasing said first and second functional components into an open position and a folded position, said bi-stable member defining at least one foldable portion having a substantially flattened transverse cross-section in said folded position and a substantially curved transverse cross-section in said open position.

19. The foldable device of Claim 18, wherein:

said foldable portion of said bi-stable member comprises a strip of resilient metal.

20. The foldable device of Claim 18, wherein:

said communication member further comprises an antenna.

21. The foldable device of Claim 18, wherein:

said communication member is disposed adjacent said bi-stable member.

22. The foldable device of Claim 18, wherein:

said communication member is at least partially enclosed within said bi-stable member.

23. The foldable device of Claim 18, wherein:

said communication member is at least partially enclosed within said foldable portion of said bi-stable member.

24. The foldable device of Claim 23, wherein:

said communication member is positioned adjacent a neutral bending line defined within said foldable portion of said bi-stable member.

25. The foldable device of Claim 18, wherein:

said first functional component is positioned substantially adjacent to said second functional component in said folded position.

26. The foldable device of Claim 18, wherein:

said first functional component is configured relative to said second functional element to define an operating angle in said open position, and

wherein said operating angle is substantially between 90 to 180 degrees.

27. The foldable device of Claim 26, wherein:

said operating angle is substantially between 150 to 180 degrees.

28. The foldable device of Claim 18, further comprising:

a protective member disposed between said first functional component and said second functional component for protecting said communication member in said open position.

29. The foldable device of Claim 28, wherein:

said protective member defines a maximum operating angle.

30. The foldable device of Claim 18, further comprising:

a protective member disposed between said first functional component and said second functional component for shielding said communication member in said folded position.

31. The foldable device of Claim 30, wherein:

said protective member defines a minimum fold radius.

32. A method of manufacturing a mobile station comprising the steps of:

providing a bi-stable member for biasing said mobile station between an open position and a folded position, said bi-stable member defining at least one foldable portion having a substantially flattened transverse cross-section in said folded position and a substantially C-shaped transverse cross-section in said open position;

coupling a first functional component to said foldable portion of said bi-stable member; and

coupling a second functional component to said foldable portion of said bi-stable member.

33. The method of manufacturing a mobile station of Claim 32, further comprising the steps of:

electrically connecting a communication member between said first functional component and said second functional component.

34. The method of manufacturing a mobile station of Claim 33, further comprising the steps of:

shielding said communication member in said open and closed positions with a protective member.